

WHAT IS CLAIMED IS:

1 1. An electronic connector connected to a sensor or a switch, and  
2 communicating a signal through a common bus, comprising:  
3 an I/O unit, receiving a signal from the sensor or the switch;  
4 a control unit, generating a control signal for controlling the driving of a  
5 load corresponding to the sensor or the switch according to the signal received  
6 from the I/O unit; and  
7 a communication unit, having a function of decoding the control signal,  
8 and transmitting the control signal to an equipment connected to the  
9 corresponding load through the common bus.

1 2. The electronic connector as set forth in claim 1, wherein the equipment  
2 is at least one of the electronic connector, an electronic control unit and an  
3 auxiliary equipment module having a function of generating the control signal.

1 3. The electronic connector as set forth in claim 1, wherein the common  
2 bus is a dedicated communication line.

1 4. The electronic connector as set forth in claim 1, wherein the common  
2 bus is a power supply line; and  
3 wherein the control signal is transmitted while being superposed on the  
4 power supply line.

1 5. An electronic connector connected to a load, and communicating a

2 signal through a common bus, comprising:

3 a communication unit, receiving a control signal for controlling the  
4 driving of the load through the common bus;

5 a control unit, decoding the control signal, and generating a drive signal  
6 for driving the load; and

7 a load driving unit, driving the load according to the drive signal.

1 6. The electronic connector as set forth in claim 5, wherein the load is at  
2 least one electronic component out of a plurality of electronic components  
3 contained in an auxiliary equipment module.

1 7. The electronic connector as set forth in claim 6, further comprising an  
2 I/O unit which receives a signal from at least one sensor or at least one switch  
3 out of the plurality of electronic components,  
4 wherein the control unit generates the drive signal for driving the load  
5 according to the signal received from the I/O unit.

1 8. The electronic connector as set forth in claim 7, wherein the control unit  
2 generates a control signal for controlling the driving of a load corresponding to  
3 the sensor or the switch according to the signal received from the I/O unit;  
4 wherein the communication unit has a function of decoding the control  
5 signal; and  
6 wherein the communication unit transmits the control signal to an  
7 equipment connected to the corresponding load through the common bus.

1 9. The electronic connector as set forth in claim 5, wherein the equipment  
2 is at least one of the electronic connector, an electronic control unit and an  
3 auxiliary equipment module having a function of generating the control signal.

1 10. The electronic connector as set forth in claim 5, wherein the common  
2 bus is a dedicated communication line.

1 11. The electronic connector as set forth in claim 5, wherein the common  
2 bus is a power supply line; and  
3 wherein the control signal is transmitted while being superposed on the  
4 power supply line.

1 12. An auxiliary equipment module having a plurality of electronic  
2 components, and communicating a signal through a common bus, comprising:  
3 a communication unit, receiving a control signal for controlling the  
4 driving of at least one load out of the plurality of electronic components;  
5 a control unit, decoding the control signal, and generating a drive signal  
6 for driving the load; and  
7 a load driving unit, driving the load according to the drive signal.

1 13. The auxiliary equipment module as set forth in claim 12, further  
2 comprising an I/O unit, receiving a signal from at least one sensor or at least one  
3 switch out of the plurality of electronic components,  
4 wherein the control unit generates the drive signal for driving the load  
5 according to the signal received from the I/O unit.

1 14. The auxiliary equipment module as set forth in claim 13, wherein the  
2 control unit generates a control signal for controlling the driving of a load  
3 corresponding to the sensor or the switch according to the signal received from  
4 the I/O unit;

5 wherein the communication unit has a function of decoding the control  
6 signal; and

7 wherein the communication unit transmits the control signal to the  
8 equipment connected to the corresponding load through the common bus.

1 15. The auxiliary equipment module as set forth in claim 11, wherein the  
2 equipment is at least one of the electronic connector, an electronic control unit  
3 and an auxiliary equipment module having the function of generating the control  
4 signal.

1 16. The auxiliary equipment module as set forth in claim 12, wherein the  
2 common bus is a dedicated communication line.

1 17. The auxiliary equipment module as set forth in claim 12, wherein the  
2 common bus is a power supply line; and

3 wherein the control signal is transmitted while being superposed on the  
4 power supply line.